

Date: Monday, 6/19/2006 11:26:23 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SHORT STEP ASSEMBLY HIGH SKID RH
Job Number : 27618	
Estimate Number : 10720	
P.O. Number : N/A	Part Number : D350591214
This Issue : 6/19/2006 S.O. No. : N/A	Drawing Number : D3078 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LARGE FAB ASSY	Drawing Revision : A
Previous Run : 26656	Material : N/A
Written By : <i>See Comment Below</i>	Due Date : 7/15/2006 Qty: 10 Um: Each
Checked & Approved By : <i>06.06.19</i>	
Comment : Est Rev:B 05.10.14 Modified step 10 KJ/EC	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-214 CHG001

*KJ 06.06.25*

2.0	D2622120C	Extrusion
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Comment: Qty.: 0.5000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

.5 D2622-120 Extrusion *327077**06.07.08 10*

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078

2-Drill extrusion as per Dwg D3078 using Jig DT8680 for rivets.

3-Deburr

*06.07.08 10*  
*06.07.10 10*  
*06.07.10 10*

4.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

*06.07.10 10*

5.0	D30671	End Plate
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 27618

Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

1 D3067-1 End Plate B27591

*LE. 06-07-10*

10

6.0

D30631

Support



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3063-1 Support B24353

*LE. 06-07-10*

10

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8681, weld Fwd End Plate as per QSI 004 & Dwg D3078

A/R Aluminum Rod M101660  
M15689

3-Grind End Plate flush

*LE. 06-07-10*

*LE. 06-07-10*

10

10

*FF 06-07-11*

10

8.0

QC/9

WELD INSPECTION



Comment: Inspect weld and work to Step 9

*LE. 06-07-11*  
*FF 06-07-12*

10

9.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*SAR 06-07-12*

10

10.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*FF 06-07-13*

10

11.0

D3065041

Step Leg Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3065-041 Step Leg Assy B26211

*FF 06-07-13*

10

W/O:		WORK ORDER CHANGES					
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 27618

Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 D3066-1

Spacer

B27444

FF 06-07-13

13.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total: 160.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W4

Rivet

M14085

(164)

FF 06-07-13

14.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Rivet Leg Assembly as per Dwg D3078.

FF 06-07-13

FF 06-07-13

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

16.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3067-1

End Plate

B27591

FF 06-07-17

17.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3078

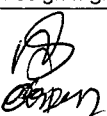
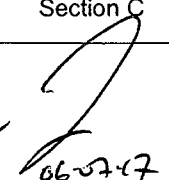
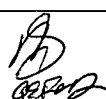
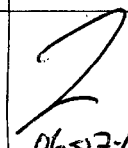
A/R Aluminum Rod M15689


FF 06-07-13

FF 06-07-17

FF 06-07-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
06-07-17	14	6 rivets no good. Stem broke off inside the rivet head. one in each step.		drill out rivets and replace.	h.e. 06-07-17	 06-07-17		 06-07-17

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA:  Date: 06/07/28

NOTE: Date & initial all entries

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Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Grind End Plate flush

18.0

QC5/9

WELD INSPECTION



*Handwritten: 06-07-17 = 7 / 06-07-18 = 3*



Comment: Inspect work & Weld to Current - Check dimension 108.93" & 3.375" as per Dwg D3272

*Handwritten: PD 06-07-19 (10)*

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Touch Up Chemical conversion

*Handwritten: FF 06-07-19 10*

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*Handwritten: SC 06/07/20 (10)*

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3078 and QSI 005 4.4

*Handwritten: a.m 06-07-22 (10)*

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

24.0

D2182B

Neoprene Cushion-.750 bl



Comment: Qty.: 0.3000 f(s)/Unit Total: 3.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2182b035 Rubber Cushion

*Handwritten: B23172 - (12mx) ✓ B18914 - (12mx) ✓ B24870 - (12mx)*

25.0

D2274

Radius Block



Comment: Qty.: 4.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2274 Radius Block

*Handwritten: B26500 ✓*

W/O:		WORK ORDER CHANGES					
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			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
06/07/24	200	Bald spot on the outside of the step leg on the P.C.		Touch-up with P.C. As per R.S. 1004. QSI 004.4.3.5-1	DL 06/07/25			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

D2732

Rubber Extrusion



Comment: Qty.: 0.2500 f(s)/Unit Total : 2.5000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2732-030 Rubber Cushion B 26472 ✓

27.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 6.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D2856-400(7.2") Abrasion Strip B 27545 ✓

28.0

D30641

Clamp



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3064-1 Clamp B 23406 ✓

29.0

D30801

Clamp



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3080-1 Clamp B 25453 ✓

30.0

AN335A

Bolt



Comment: Qty.: 6.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 AN3-35A Bolt M19551 ✓

31.0

AN411A

Bolt



Comment: Qty.: 6.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 AN4-11A Bolt M17771 ✓

W/O:		WORK ORDER CHANGES					
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Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

32.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10 Washer M100743 ✓

33.0

AN960JD416

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 120.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 AN960JD416 Washer M101369 ✓

34.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3 Nut (or -3) M10094 ✓

35.0

MS21042L4

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 MS21042L4 Nut (or -4) M19085 ✓

36.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

37.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-214

Location:

PPP Rev: C

35A

1 x DSF9340-011

16 B27681 ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

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Job Number: 27618

Part Number: D350591214

Job Number:



Seq. #:

Machine Or Operation:

Description :

38.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL  
Inspection Level 21

*Handwritten:* 06/19/28

Job Completion



*Handwritten:* 06.07.26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. <b>D3078</b>	REV. A SHEET 1 OF 2
DATE <b>02.09.11</b>		TITLE <b>STEP ASSEMBLY, HI SHORT</b> SCALE NTS	
A	02.09.11	NEW ISSUE	

**RELEASED**  
02.09.20 *#*

Part No.	Description	QTY -041	QTY -042
D3078-041	Step Assembly, High Short (LH)	X	
D3078-042	Step Assembly, High Short (RH)		X
D2622-60	STEP EXTRUSION	1	1
D3063-1	SUPPORT	1	1
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

**GENERAL NOTES:**

- 1) -041 SHOWN, FOR -042 INSTALL D3063-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

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WORK ORDER  
NO. 27618

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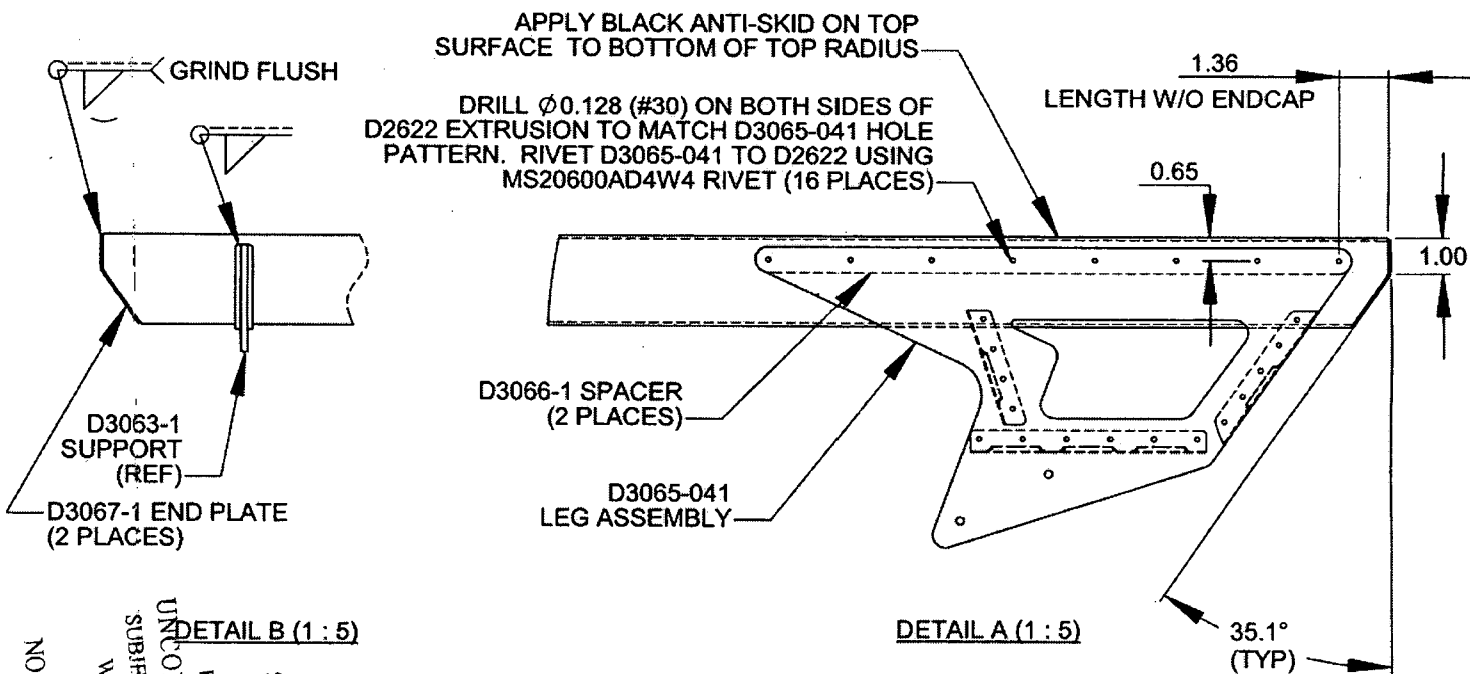
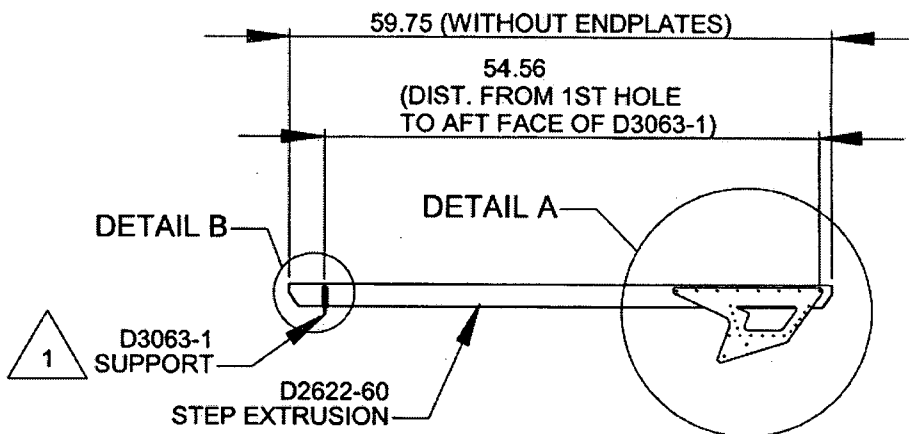
**DART**



DESIGN	W	DRAWN BY	W	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
CHECKED	W	APPROVED	W	REV. A
DATE	02.09.11	DRAWING NO.	D3078	SHEET 2 OF 2
TITLE	STEP ASSEMBLY, HI SHORT	SCALE	1:20	

RELEASED  
02.09.2004

D.O.L



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